

**AMENDMENTS TO THE SPECIFICATION:**

Please replace the paragraph beginning at page 5, line 9 in the specification with the following replacement paragraph:

— According to a first aspect of the present invention, there is provided an optical fiber preform elongation process, ~~as set forth in claim 1.~~ —

Please replace the paragraph beginning at page 6, line 29 in the specification with the following replacement paragraph:

— According to a second aspect of the present invention, there is provided an optical fiber preform elongation process, ~~as set forth in claim 10.~~ —

Please replace the paragraph beginning at page 8, line 7 in the specification with the following replacement paragraph:

— According to a third aspect of the present invention, there is provided a process for manufacturing an optical fiber, ~~as set forth in claim 19.~~ —

Please replace the paragraph beginning at page 8, line 26 in the specification with the following replacement paragraph:

— According to a fourth aspect of the present invention, an apparatus for elongating an optical fiber preform is provided, ~~as set forth in claim 20.~~ —

Please replace the paragraph beginning at page 16, line 5 in the specification with the following replacement paragraph:

— For example, the analysis of the obtained neck profile allows determining in real time the neck starting point ( $x_1$  in FIG. 3) and the neck final point ( $x_2$  in FIG 3), the neck length ( $|x_2 - x_1|$ ), the diameter of the preform ( $D$  in FIG. 3) at every point along the neck. The analysis of the neck profile may even allow deriving a mathematical formula describing analytically the neck profile. —

Please replace the paragraph beginning at page 20, line 16 in the specification with the following replacement paragraph:

— Summarising, on the basis of the continuous profile of the neck obtained after processing the image captured by the image capturing device 115, the diameter of the preform is determined (from the analysis of the neck profile) in at least one point (identified as  $x_3$  in FIG 3) whose position along the neck is not fixed with respect to the heated region of the preform, in particular to the heating element (furnace or burner), as in the known techniques, but varies depending on the neck geometry, which is derived from the analysis of the neck profile. For example, the diameter of the neck is calculated at a point, along the neck profile, which is fixed with respect to the neck starting point or to the neck final point, determined in turn by analysing the neck profile. —